

Amendments to the Specification:

Please replace the paragraph (List of Variables) beginning at page 10, line 7 and ending on page 11, line 7 with the following rewritten paragraph:

List of Variables

5

\dot{m} Mass flow (kg/sec)

P_{in} Inlet pressure

P_{out} Outlet pressure

V Flow velocity

10 ρ Gas density

γ Ratio of specific heats, c_p/c_v

$$\alpha = \sqrt{\gamma \left(\frac{2}{1+\gamma} \right)^{\frac{\gamma+1}{\gamma-1}}}$$

$$\delta = \sqrt{\frac{2\gamma}{(\gamma-1)}}$$

R Gas constant in $p = \rho RT$ (8314 m²/K-sec² divided by molecular weight)

15 W Microvalve valve seat periphery length

A Microvalve area enclosed by the valve seat periphery

D_h Microvalve inlet length parameter ($=\sqrt{A}$)

A_{eff} Microvalve effective flow area

z Microvalve membrane-to-inlet gap

20 r Ratio of gap to inlet length parameter: $r=z/D_h$

- r_0 The ratio of gap to inlet length parameter which defines the boundary between seat-controlled flow and transition flow, according to Reference [10] [9]
- ϕ Ratio of valve seat periphery length to inlet length parameter: $\phi=W/D_h$
- C_d Microvalve inlet coefficient of discharge
- 5 C_v Microvalve coefficient of flow